IN THE CLAIMS

The pending claims, including amended and new claims, are as follows:

1. (Currently amended) Burner for heat generation in particular in a gas turbine, comprising:

inlet openings for a combustion air stream, at least a swirl generator for the combustion air stream, and one or more first fuel supplies with first fuel outlet openings for injection of fuel into the combustion air stream; and

at least one resonance tube with one open end and one essentially closed end arranged in or at the burner, the closed end being positioned in a region of a flame front which forms during operation of the burner on a side of the burner, the open end disposed proximate an outlet opening of a supply for a compressible medium;

wherein the supply for the compressible medium is configured to deliver the compressible medium to within the resonance tube.

2. (Original) The burner of claim 1, wherein the closed end of the resonance tube is arranged on, or at least within, a region of a central burner axis.

3. (Original) The burner of claim 1, wherein the closed end of the resonance tube is arranged within a region defined by lateral limitations of an outlet opening of the burner.

4. (Original) The burner of claim 1, wherein several resonance tubes are provided.

5. (Original) The burner of claim 4, wherein at least one of the resonance tubes is arranged with the closed end thereof on, or at least within, a region of a central burner axis, and the additional resonance tubes are arranged with closed ends thereof within a region defined by lateral limitations of an outlet opening of the burner.

6. (Original) The burner of claim 1, wherein at least one said resonance tube is integrated in a central burner lance for the supply of pilot fuel, or in a central displacement body.

7. (Original) The burner of claim 1, wherein the at least one resonance tube is arranged parallel to the burner axis.

8. (Original) The burner of claim 1, wherein the at least one resonance tube is arranged cone-shaped, or conical about the burner axis.

9. (Original) The burner of claim 1, wherein the at least one resonance tube has a constant interior diameter.

10. (Original) The burner of claim 1, wherein an interior diameter of the at least one resonance tube decreases from the open end toward the closed end.

11. (Original) The burner of claim 10, wherein the interior diameter decreases in intervals.

12. (Original) The burner of claim 1, wherein the outlet opening forms a nozzle.

13. (Original) The burner of claim 12, wherein a compressor is arranged in the supply for the compressible medium for compression in order to enable injection of the compressible medium through the nozzle into the resonance tube at a supercritical state.

14. (Original) The burner of claim 1, wherein the supply is a supply for compressed air.

15. (Currently amended) ~~The burner of claim 1,~~ Burner for heat generation in particular in a gas turbine, comprising:

inlet openings for a combustion air stream, at least a swirl generator for the combustion air stream, and one or more first fuel supplies with first fuel outlet openings for injection of fuel into the combustion air stream; and

at least one resonance tube with one open end and one essentially closed end arranged in or at the burner, the closed end being positioned in a region of a flame front which forms during operation of the burner on a side of the burner, the open end disposed proximate an outlet opening of a supply for a compressible medium;

wherein the supply is a second fuel supply switchable on and off independently of the first fuel supplies for the pressurization of the at least one resonance tube with gaseous fuel as the compressible medium.

16. (Original) The burner of claim 15, wherein the at least one resonance tube has an opening at the closed end through which a small portion of the fuel injected into the resonance tube can leave.

17. (Original) The burner of claim 16, wherein the resonance tube is disposed on a central burner axis, with the open end of the resonance tube being connected to at least one supply channel through which fuel leaving the open end is injectable into the flame.

18. (Original) The burner of claim 17, wherein the at least one supply channel is a supply for pilot fuel.

19. (Original) The burner of claim 1, further comprising a pressure holding reservoir and a pressure holding gauge arranged in the supply and used to maintain pressure of the compressible medium nearly constant in front of the at least one resonance tube.

20. (Original) The burner of claim 1, further comprising a pressure holding reservoir and a control gauge arranged in the supply and used to maintain a nearly constant pressure ratio of the compressible medium pressure in front of the at least one resonance tube to pressure in a connected combustion chamber, or to control the same.

21. (Original) Method for the operation of a burner for improved stabilization of a flame, in which the flame is stabilized by an at least one resonance tube with an open end and an essentially closed end, with the closed end being arranged in a region of a flame front forming on a side of the burner, and being pressurized by means of a compressible medium from the open end at least during the occurrence of flame pulsations continuously such that the compressible medium periodically enters and leaves the at least

one resonance tube through the open end, wherein the closed end of the resonance tube is heated.

22. (Original) The method of claim 21, wherein the at least one resonance tube also is used for igniting the burner, the at least one resonance tube being pressurized with the compressible medium from the open end such that the closed end is heated to an ignition temperature.

23. (Original) The method of claim 21, wherein the at least one resonance tube is pressurized with air as the compressible medium.

24. (Original) The method of claim 21, wherein the at least one resonance tube is pressurized with gaseous fuel as the compressible medium.

25. (Original) The method of claim 24, wherein fuel leaving again from the open end of the at least one resonance tube is injected into the flame proximate the closed end of the at least one resonance tube.

26. (Original) The method of claim 24, wherein a small portion of fuel injected into the at least one resonance tube is injected into the flame through an opening at the closed end.

27. (Original) The method of claim 21, wherein the compressible medium is injected into the at least one resonance tube, through a nozzle, in a supercritical state.

28. (Original) The method of claim 21, wherein the compressible medium is additionally pressurized before injection into the at least one resonance tube.

29. (Original) The method of claim 21, wherein pressure of the compressible medium fed to the at least one resonance tube is maintained constant by means of a pressure reservoir and a pressure holding gauge in a supply.

30. (Original) The method of claim 21, wherein a ratio of pressure of compressible medium fed to the at least one resonance tube to pressure in a combustion

chamber associated therewith is maintained constant by means of a pressure reservoir and a control gauge in a supply.

31. (New) Burner for heat generation in particular in a gas turbine, comprising:

inlet openings for a combustion air stream, at least a swirl generator for the combustion air stream, and at least one fuel supply for injection of fuel into the combustion air stream; and

at least one resonance tube with one open end and one essentially closed end, the closed end being disposed proximate a region for a flame front that forms during operation of the burner, and the open end being disposed in communication with an outlet opening of a supply for a compressible medium.